

(21) Application No 8041338
(22) Date of filing 29 Dec 1980
(30) Priority data
(31) 7936695U
(32) 28 Dec 1979
(33) Fed Rep of Germany (DE)
(43) Application published
22 Jul 1981

(51) INT CL³
B01D 39/18 //
A47J 37/12

(52) Domestic classification
B1D 1108 1504 1808 AK
PX
A4D 7

(56) Documents cited
GB 1072310
GB 685874
101 Things For Little Folks
To Do, pages 14, 15 & 29.
By Lea Horth. Pub.
Lippincott Co. Fifth Edn.

(58) Field of search
A4D
A4E
B1D
B8D

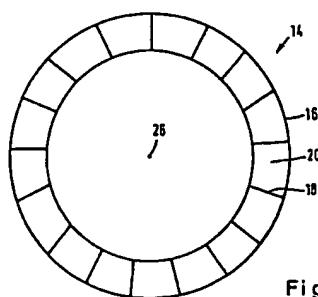
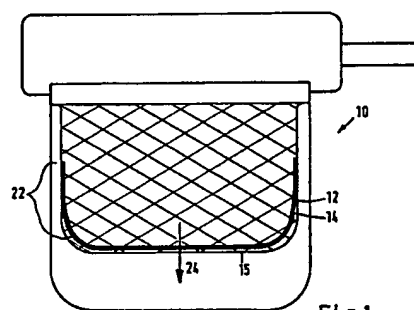
(71) Applicants
Firma Riensch & Held,
Danziger Strasse 17, 2000
Hamburg 1, Federal
Republic of Germany

(72) Inventors
Horst Ulrich Von Ludowig

(74) Agents
Kilburn & Strobe,
30 John Street,
London, WC1N 2DD

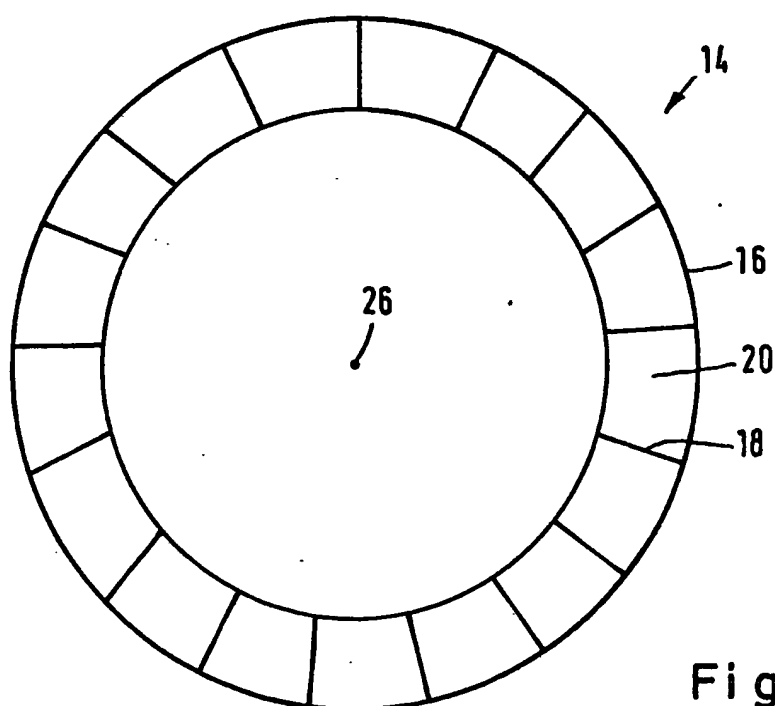
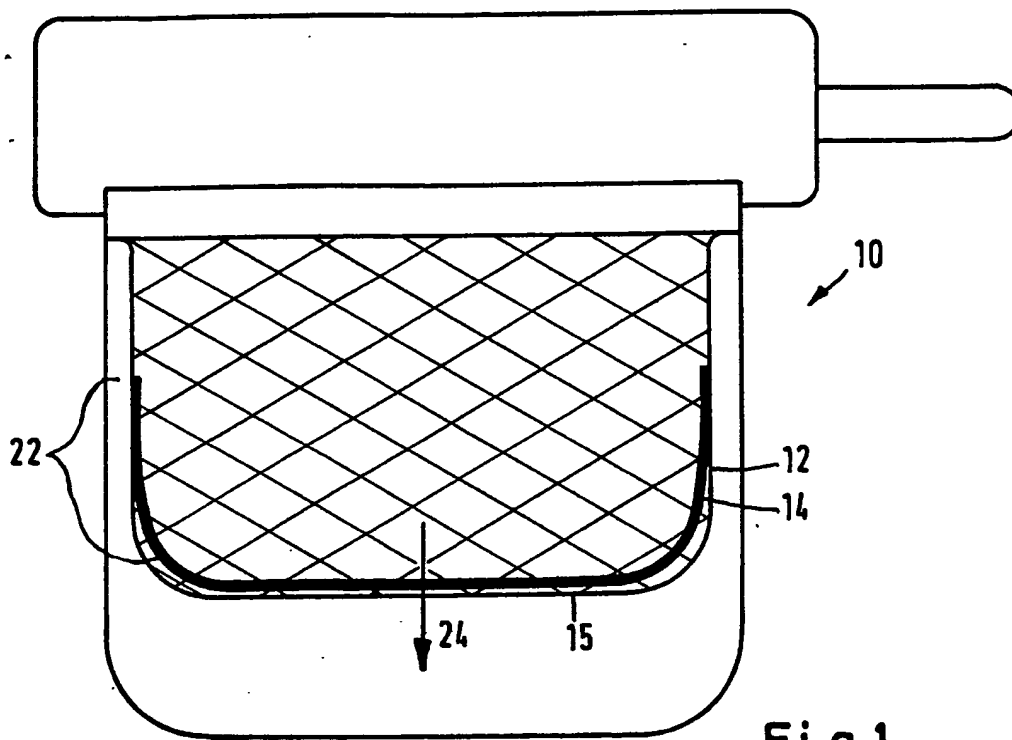
(54) Filter sheets and deep fryers
incorporating filter sheets

(57) A filter sheet and a deep fryer comprising a vessel (10), a basket (12) insertable into the vessel and the filter sheet (14) inserted into the basket. The filter sheet is preferably flat and circular and has radial cuts (18) extending inwardly from the periphery partway to the centre to enable the filter sheet to be shaped to form side walls (22) to adapt itself to the basket. The filter sheet separates out residues such as parts of the items fried in the deep fryer.



2067085

1/1



SPECIFICATION

Filter sheets and deep fryers incorporating filter sheets

5

This invention relates to filter sheets and to deep fryers incorporating such sheets.

Vessels for frying constructed with a basket-like sieve insert are known in the art in the most varied forms, their size being adapted to the particular use, for example for large kitchens or private households. However, one feature which they all have in common is that when the same oil or fat is used several times residues of the fried items and also burnt oil remain. Therefore for economic reasons the fluid fat or oil which has been used one or more times is filtered in the hottest state possible. The hotter the oil, the more fluid it is and correspondingly the more rapidly it can be filtered. Conventional filter supports with corresponding filter papers can be used for filtering. However, these have the disadvantage that extra utensils have to be made available and also have to be cleaned and that pouring of hot fat or oil is a hazardous procedure.

In addition, frying filter sheets are known which are circular and flat and can be easily laid in the appropriate frying filter which, however, has a closed side wall so that filtering can be easily carried out. A filter of this type cannot, however, be used with basket-like sieve inserts which have a side wall through which the oil or fat can pass. Unfortunately it is clear that the simple circular filter cannot be used with these utensils.

One object of the present invention is to construct a filter sheet in such a way that it can be used with the conventional vessels for frying having a basket-like sieve insert. A further object of the present invention, therefore, is to provide a vessel for frying with a basket-like sieve insert and a filter sheet which can be laid inside it to facilitate simple, reliable and rapid purification of frying fat and oil.

According to one aspect of the present invention, a filter sheet has a plurality of cuts on its outer edge which forms individual segments which can be bent upwards to form a side wall. Preferably the filter sheet is a fleece (*Vlies* in German).

According to another aspect of the present invention, a deep fryer comprises a vessel, a basket insertable into the vessel and a filter sheet according to the first aspect, the filter sheet being adapted to the shape of the basket and being inserted into the basket.

The invention may be carried into practice in various ways and a deep fryer and a filter sheet embodying the invention will be described by way of example with reference to the accompanying drawings in which:

Figure 1 is a cross-section of the deep fryer; and
Figure 2 shows a plan view of the filter sheet.

Figure 1 shows a deep fryer comprising a vessel 10 containing a basket-like sieve insert 15 and a frying filter sheet 14. The deep fryer may also be called a chip pan or chip fryer. For the purposes of function and use this assembly of several parts can be handled as one unit. For the purpose of filtering, the inter-

relation of the individual parts (vessel 10, basket-like sieve insert 12 and frying filter sheet 14) is intended to be maintained for substantial periods of time.

The aforesaid parts are interrelated in technical function. It can be clearly seen that the shape of the sheet is adapted to that of the sieve insert 12 and prevents oil or fat from passing through the basket-like sieve structure in the region of the side wall 2 without being filtered. This would not be the case if only a circular flat filter sheet were laid on the bottom surface 15 of the basket-like sieve insert 12. The general direction of filtration is indicated by the arrow 24. Thus, the filter sheet holds back solid residues of any kind. Advantageously the filter sheet is a wet fleece in a tangled condition. The filter sheets contain cuts 18 which are approximately perpendicular to the central point 26 of the fleece. In Figure 2 seventeen cuts 18 are shown, but any other number of cuts can be selected to form segments 20 which can then be bent upwards and inserted into the basket-like insert 12 so that they overlap each other, the walls of the filter sheet (22) reaching only partway up the walls of the basket.

The basket can alternatively be constructed with corners. In this case the cuts are made only at the corners of the filter sheet.

CLAIMS

1. A filter sheet having a plurality of cuts on its outer edge which forms individual segments which can be bent upwards to form a side wall.
2. A filter sheet as claimed in Claim 1 which is a fleece.
3. A filter sheet as claimed in Claim 2 which is a wet fleece in a tangled state.
4. A filter sheet as claimed in Claim 1, 2 or 3 in which the cuts are such that if continued they would pass through the centre point of the filter sheet.
5. A filter sheet as claimed in Claim 1, 2, 3 or 4 in which the segments formed by the cuts overlap each other on their cut edges when they are bent upwards to form the side walls.
6. A filter sheet as claimed in any one of the preceding claims in which the filter sheet is circular and the cuts are arranged at regular intervals around the circumference.
7. A filter sheet as claimed in any one of Claims 1 to 5 in which the filter sheet has corners and the cut or a plurality of cuts are arranged in or in the vicinity of the corners.
8. A filter sheet substantially as specifically described herein with reference to Figure 2 of the accompanying drawings.
9. A deep fryer comprising a vessel, a basket insertable into the vessel and a filter sheet as claimed in any one of the preceding claims, the filter sheet being adapted to the shape of the basket and being inserted into the basket.
10. A deep fryer as claimed in Claim 9 in which both the basket and the filter sheet have an approximately circular base surface.
11. A deep fryer as claimed in Claim 9 in which both the basket and the filter sheet have an approximately rectangular base surface.
12. A deep fryer as claimed in Claim 9, 10 or 11 in which the side wall of the filter sheet extends part-

way up the side walls of the basket.

13. A deep fryer substantially as specifically described herein with reference to Figure 1 of the accompanying drawings.

Printed for Her Majesty's Stationery Office by The Tweeddale Press Ltd.,
Berwick-upon-Tweed, 1981.
Published at the Patent Office, 25 Southampton Buildings, London, WC2A 1AY,
from which copies may be obtained.